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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,265	03/24/2004	Yuichi Komachi	Q80643	4118

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WASHINGTON, DC 20037

EXAMINER
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GEISEL, KARA E

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/807,265

Applicant(s)

KOMACHI ET AL.

Examiner

Kara E. Geisel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0704</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Preliminary Amendment*

The preliminary amendment filed on March 24<sup>th</sup>, 2004, has been entered into this application.

### *Information Disclosure Statement*

The information disclosure statement filed July 30<sup>th</sup>, 2004 has been considered by the examiner.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kittrell et al. (USPN 5,693,043).

In regards to claim 1, Kittrell discloses a Raman probe (figs. 1 and 22) for measuring Raman spectrum (column 19, lines 40-46), comprising an exciting wave-guide path (20a) for guiding light from a light source (illuminating light) to a sample (to tissue site), and a receiving wave-guide path (20b-c and 20b'-c') for guiding a light signal from said sample to a detector (60), wherein said exciting wave-guide path and said receiving wave-guide path comprise hollow pipes (column 12, lines 44-46) with their internal walls formed with a metal reflecting surface (column 12, lines 44-48).

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In regards to claim 4, the inside of said hollow wave-guide is evacuated or filled with a gas other than air (column 12, lines 46-48; air OR gas, indicating a gas other than air).

In regards to claim 7, the exciting waveguide path is made of a single hollow wave-guide (fig. 1, 20a), and the receiving wave-guide path is made of a plurality of hollow pipes arranged around the single hollow wave-guide (20b-c and 20b'-c') when seen at a sample side end of the receiving guide path (fig. 1A).

In regards to claim 8, Kittrel discloses using the probe in a Raman spectrum measuring apparatus (fig. 24) comprising a laser light source (98), a spectrograph (76, 64), and the Raman probe for guiding light from the laser to a sample and from the sample to the spectrograph (10).

Claims 1-6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Puppels (US Pubs 2004/0263842).

In regards to claim 1, Puppels discloses a Raman probe (figs. 1-2, 12) for measuring Raman spectrum (page 1, ¶ 1), comprising an exciting wave-guide path (arrow pointing toward the right of the page in fig. 2) for guiding light from a light source to a sample (16), and a receiving wave-guide path (arrows pointing toward the left side of the page in fig. 2) for guiding a light signal from said sample to a detector (14), wherein said exciting wave-guide path and said receiving wave-guide path comprise hollow pipes (page 2, ¶ 17) with their internal walls formed with a metal reflecting surface (page 3, ¶ 38).

In regards to claim 2, the metal reflecting surface is formed by a thin film of silver, gold, copper, platinum or aluminum (page 3, ¶ 38).

In regards to claim 3, the hollow wave-guide has its ends covered with a light-transmitting window having little Raman scattering (fig. 4, 41, and page 4, ¶ 47).

In regards to claim 4, the inside of said hollow wave-guide is evacuated or filled with a gas other than air (page 1, ¶ 11; it is inherent that if the guide is evacuated, the air is being removed from it, so that a gas other than air can fill it).

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In regards to claim 5, the hollow wave-guide is circular in cross section and has an internal diameter of 100 to 1000  $\mu\text{m}$  (page 3, ¶ 37).

In regards to claim 6, the same hollow wave-guide is used for both the exciting wave-guide path and the receiving wave-guide path (fig. 1A, 12).

In regards to claim 8, Puppels discloses using the probe in a Raman spectrum measuring apparatus (fig. 1A) comprising a laser light source (10), a spectrograph (14), and the Raman probe for guiding light from the laser to a sample and from the sample to the spectrograph (12).

#### *Additional Prior Art*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art made of record is Wach et al. (USPN 6,370,406) and Kittrell et al. (US Pubs 2002/0045811).

Wach and Kittrell disclose a Raman probe for measuring Raman, comprising an exciting wave-guide path for guiding light from a light source to a sample, and a receiving wave-guide path for guiding a light signal from said sample to a detector, wherein said exciting wave-guide path and said receiving wave-guide path comprise hollow pipes with their internal walls formed with a metal reflecting surface

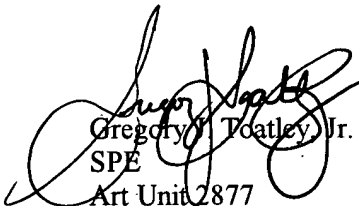
#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kara E Geisel whose telephone number is 571 272 2416. The examiner can normally be reached on Monday through Friday, 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571 272 2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gregory J. Toatley, Jr.  
SPE  
Art Unit 2877

K.G.  
KEG  
May 18, 2006